# **KAWAI**

## **DIGITAL PIANO**

# EP2

**OWNER'S MANUAL** 

## **Important Safety Instructions**

## SAVE THESE INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS





#### WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

## AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR.

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lighting flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of Important operating and maintenance (servicing) Instructions in the leterature accompanying the

#### **Examples of Picture Symbols**



denotes that care should be taken.

The example instructs the user to take care not to allow fingers to be trapped.



denotes a prohibited operation.

The example instructs that disassembly of the product is prohibited.



denotes an operation that should be carried out.

The example instructs the user to remove the power cord plug from the AC outlet.

Read all the instructions before using the product.

WARNING - When using electric products, basic precautions should always be followed, including the following.



WARNING Indicates a potential hazard that could result in death or serious injury if the product is handled incorrectly.

The product should be connected to an AC outlet of the specified voltage.







 If you are going to use an AC power cord, make sure that its has the correct plug shape and conforms to the specified power voltage.

Failure to do so may result in fire.

Do not insert or disconnect the power cord plug with wet hands.



Doing so may cause electric shock.

When using the headphones, do not listen for long periods of time at high volume levels.



Doing so may result in hearing problems.

Do not disassemble, repair or modify the product.



Doing so may result in product breakdown, electric shock or short-circuit.

When disconnecting the AC power cord's plug, always hold the plug and pull it to remove it.



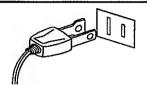
 Pulling the AC power cord itself may damage the cord, causing a fire, electric shock or short-circuit.

The product is not completely disconnected from the power supply even when the power switch is turned off. If the product will not be used for a long time, unplug the AC power cord from the AC outlet.



- · Failure to do so may cause fire in case of lightning.
- Failure to do so may over-heat the product, resulting in fire.

This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.



It is a good practice to have the instrument near the AC outlet and the power cord plug in a position so that it can readily be disconnected in an emergency because electricity is always charging while the plug is in the AC outlet even in a power switch off conditiion.



CAUTION Indicates a potential hazard that could result in injury or damage to the product or other

Do not use the product in the following areas.

- Areas, such as those near windows, where the product is exposed to direct sunlight
- Extremely hot areas, such as near a heater
- Extremely cold areas, such as outside
- Extremely humid areas
- Areas where a large amount of sand or dust is present
- Areas where the product is exposed to excessive vibrations

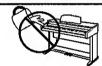
Using the product in such areas may result in product breakdown.

Before\_connecting\_cords,\_make\_sure that the power to this product and other devices is turned OFF.



Failure to do so may cause breakdown of this product and other devices.

Take care not to allow any foreign matter to enter the product.



Entry of water, needles or hair pins may result in breakdown or short-circuit. The product shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the product.

Do not drag the product on the floor. Take care not to drop the product.



Please lift up the product when moving it. Please note that the product is heavy and must be carried by more than two persons Dropping the product may result in breakdown.

Do not place the product near electrical appliances such as TVs and radios.



- Doing so may cause the product to generate
- If the product generates noise, move the product sufficiently away from the electrical appliance or connect it to another AC outlet.

When connecting the AC power cord and other cords, take care not to get them tangled.



Failure to do so may damage them, resulting in fire, electric shock or short-circuit.

Do not wipe the product with benzene or thinner.



- Doing so may result in discoloration or deformation of the product.
- When cleaning the product, put a soft cloth in lukewarm water, squeeze it well, then wipe the product.

Do not stand on the product or exert excessive force.



 Doing so may cause the product to become deformed or fall over, resulting in breakdown or injury.

The product should be located so that its location or position does not interfere with its proper ventilation. Ensure a minimum distance of 5cm around the product for sufficient ventilation. Ensure that the ventilation is not impeded by covering the ventilation openings with items, such as newspaper, table-cloths, curtains, etc.

Do not place naked flame sources, such as lighted candles on the product.

The product should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged.
- Objects have fallen, or liquid has been spilled into the product.
- The product has been exposed to rain.
- The product does not appear to operate normally or exhibits a marked change in performance.
- The product has been dropped, or the enclosure damaged.

**Notes on Repair** 

Should an abnormality occur in the product, immediately turn the power OFF, disconnect the power cord plug, and then contact the shop from which the product was purchased.

#### CAUTION:

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

#### ATTENTION:

Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

#### **Canadian Radio Interference Regulations**

This instrument complies with the limits for a class B digital apparatus, pursuant to the Radio Interference Regulations, C.R.C., c. 1374.

## FCC Information (U.S.A)

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## FC Declaration of Conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Model Name: EP2

Responsible Party Name: Kawai America Corporation

Address: 2055 East University Drive Rancho

Dominguez, CA 90220

Telephone: 310-631-1771

This applies only to products distributed by Kawai America Corporation.

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Thank you for choosing this Kawai EP2 Digital Piano.

Your new EP2 is a high-quality instrument offering the very latest in leading-edge music technology. This manual contains valuable information that will help you make full use of your EP2's many capabilities. Please read it carefully and keep it handy for further reference.

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## **PART NAMES**

## Master Volume Slider (A)

Move the volume slider to the right to increase the instrument's volume. Move the slider to the left to decrease the volume.

## **Demo Button (B)**

Press this button to start the demo. To stop the demo, press this button again. See page 12 for details.

## Split Button (C)

The split function divides the keyboard into two sections—upper and lower—and lets you play each part with a different sound. See page 12 for details.

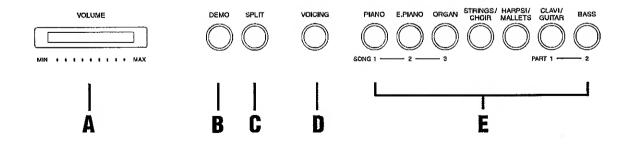
### **Voicing Button (D)**

Voicing is a technique used by piano technicians to mold the character of a piano's sound. The voicing function lets you adjust the EP2 piano's tone quality by choosing one of four types of voicings. See page 16 for details.

### Sound Buttons (E)

Select the desired instrument by pressing the appropriate button. The EP2 has two or three sounds assigned for each Sound button. When a Sound button is pressed, the variation number is briefly shown in the display. Pressing the same Sound button again will select the next variation sound assigned to the Sound button.

## **FRONT PANEL**



### **Balance/Value Buttons (F)**

Normally pressing these buttons will change the current sound to the next sound or previous sound through all the preset sounds assigned to the seven Sound buttons. However, when in Dual or Split mode, these buttons work as balance adjuster for the two selected sounds. When changing settings of various functions, these buttons work as value up/down buttons. When the Metronome is running, use these buttons to change the tempo.

## **Effects Button (G)**

Press this button to add effect. The LED indicator is lit when the effect is on. Press it again to turn the effect off. The effect type can be changed. See page 13 for details.

## **Reverb Button (H)**

Press this button to add reverb. The LED indicator is lit when the reverb is on. Press it again to turn the reverb off. The reverb type can be changed. See page 14 for details.

## Metronome (Rhythm/Metronome) Button (I)

Press this button to start metronome. Pressing again will stop metronome. The beat (time signature) can be changed. In addition, various rhythm styles can be selected for EP2. See page 18 for details.

## **Recorder Buttons (J)**

You can record and play back up to four songs.

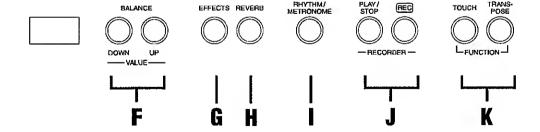
-Play/Stop button: Used to play back and stop a recorded song.

-Rec button: Used to start recording a song.

### **Function Buttons (K)**

Use these buttons to select a touch type, transpose the keyboard, or control other features (including MIDI functions). See page 22 for details.

### **KAWAI**



## MIDI Jacks (L)

Use these jacks to connect the EP2 with external MIDI devices.

## **USB Jack (M)**

This jack is used to connect with a personal computer and exchange MIDI data.

## PEDAL Jack (N)

Connect the enclosed F-10 pedal to this jack. You can also connect the optional F-20 pedal (2 pedals, Sustain & Soft).

## **SPEAKER Switch (0)**

This switch turns the built-in speakers on and off.

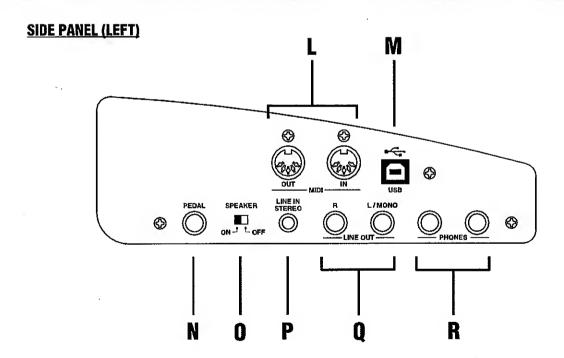
## LINE IN STEREO Jack (P)

Connect a CD player etc. with stereo mini plug.

## LINE OUT Jacks (Q)

Connect an external amplifier and speakers, or a cassette recorder to these jacks.

## **PHONES Jacks (R)**



Used to connect up to two headphones to the EP2.

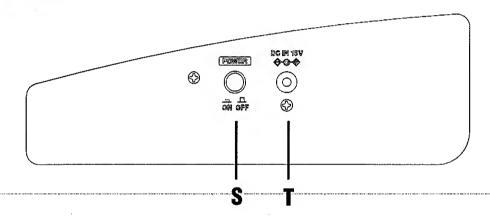
## **POWER Button (S)**

This button turns the instrument on and off. Be sure to turn off the instrument when you are finished playing.

## **AC Adaptor Jack (T)**

Connect the enclosed AC adaptor (PS-153).

## **SIDE PANEL (RIGHT)**



## **GETTING STARTED**

## 1. BASIC OPERATIONS

## (1) Turn on the power.

## (2) Adjust the volume.

Play a note on the keyboard and adjust the volume (Moving the slider to the right raises the volume while moving to the left lowers it.)

### (3) Choose a sound.

Pressing a Sound button automatically changes the sound made by the EP2. The LED indicator of the selected sound button will light to indicate which sound is currently in being used.

The EP2 has two or three sounds assigned for each Sound button. When a Sound button is pressed, the variation number is briefly shown in the display. Pressing the same Sound button again will select the next variation sound assigned to the Sound button.

## (4) Play.

Experiment by playing the different sounds.

## (5) Demo

The EP2 has a main demo and 16 built in sound demos for your listening enjoyment. Press this button and the main demo will start. When the main demo is finished, the EP2 will play the demos for Piano category. After the Piano demos are finished, the EP2 will play all the other sound demos one at a time in random order. To select a specific demo, press the desired Sound button while the demo is playing. To stop the demo, press this button again.

### (6) Dual

With Dual mode you can layer two sounds together. To layer two sounds, select the first sound and then, while holding down that Sound button, select the second sound by pressing another sound button. If you want to layer two sounds on the same Sound button, select the first sound and then, while holding down that Sound button, use the Value up/down buttons to select the second sound. To adjust the volume balance of the two sounds, use the Balance buttons. The default balance is 5-5.

#### NOTE:

When in Dual mode, the maximum polyphony will be reduced to 48 notes or less depending on the selected sounds.

#### (7) Split

The split function divides the keyboard into two sections—upper and lower—and lets you play each part with a different sound. First select the desired sound for upper section. Then, while holding down the Split button, select the desired sound for the lower section. The LED Indicator for a lower sound will start flashing. To adjust the volume balance of the two sounds, use the Balance buttons.

### (8) FOUR HANDS MODE

It is possible to divide the keyboard into left and right sections at the default split point, and to play both sections in the same key range using the four hands mode. Compared to the normal operation of the EP2 piano, the key range is lowered by two octaves for the right section, and raised by two octaves for the left section. When four hands mode is active, the sustain pedal (right pedal) acts as the sustain pedal for the right section. When using the optional F20 foot pedal the soft pedal (left pedal) acts as the sustain pedal for the left section. When four hands mode is active the EP2 functions as two pianos, so you can enjoy duet performances or use one EP2 piano for two students or a teacher and a student.

### Entering Four Hands Mode

Press the sustain pedal while holding down the SPLIT button. The SPLIT button LED indicator will start blinking and the piano is now in Four Hands Mode.

### Exiting Four Hands Mode

To exit Four Hands Mode, press the SPLIT button again. The LED indicator will be turned off.

### Selecting Sounds in Four Hands Mode

The method for selecting sounds is the same as in Split Mode. After you are in Four Hands Mode simply use the SOUND buttons to change the sound for the upper section. To change the sound for the lower section, press and hold the SPLIT button and then use the SOUND buttons.

### **Changing Split Point**

The method for changing the split point is the same as in Split Mode. After you are in Four Hands Mode press and hold the SPLIT button and press any key on the keyboard. The key you pressed becomes the lowermost note for the upper section. The default split point is set between E3 and F3.

#### Octave Shift for the Lower Section

When in Four Hands Mode, you can use the Octave Shift function to change the octave of the lower section. Please see page25 for more information on using Octave Shift.

#### (9) Effects

Adding an effect to the sound enhances tonal quality and improves acoustical realism. The EP2 piano is provided with five different kind of effects.

To turn on the Effect, press the Effect button. The LED indicator of the Effect button will be lit to indicate the Effect is now on. Pressing the Effect button once again turns the Effect "OFF".

To change the Effect type, use the Value buttons while holding down the Effect button. The LED display shows an abbreviation.



#### **CHORUS**

Chorus is an effect that simulates the rich character of a vocal choir or string ensemble, by layering a slightly detuned version of the sound over the original to enrich it.



#### **DELAY**

Delay is an effect that adds echoes to the sound.

#### **TREMOLO**

This is a vibrato type effect.



Rotary 2

#### ROTARY

This effect simulates the sound of the Rotary Speaker cabinet commonly used with electronic organs. Rotary 1 is normal rotary and Rotary 2 is with distortion effect. Pressing both Value buttons at the same time can change between the speed of the rotor SLOW and FAST. With optional F-20 foot pedal, the soft pedal is used to change the speed of the rotor as well.

## (10) Reverb

Reverb adds reverberation to the sound, simulating the acoustic environment of a recital room, stage, or concert hall. There are five types of reverb available. They are Room 1 & 2, Stage and Hall 1 & 2 (listed in order of reverberation amount). To change the Reverb type, use the Value buttons while holding down the Reverb button. The LED display shows an abbreviation.



Room 1



Room 2



Stage



Hall 1



Hall 2

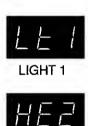
## 2. TRANSPOSE

The transpose function lets you raise or lower the piano's key in half steps. This is especially useful when you have learned a song in one key and have to play it in another key. The transpose feature allows you to play the song in the original key, but hear it in another key.

- (1) Press and hold the Transpose button. The LED display shows you the current value. The value is always set to "0" when the power is turned on.
- (2) While still holding the Transpose button, use the Value buttons or the keyboard from C2 to C4 to specify the transposition amount. The LED display shows you a number telling you how many half steps up or down you have transposed the piano. -5, for example, represents a transposition that is 5 half steps lower. "0" indicates no transposition.
- (3) The piano can be transposed up to 12 half steps higher or 12 half steps lower.
- (4) Pressing Transpose button again turns the Transpose function off. The Transpose function remembers the current setting as long as the power is on.

## 3. TOUCH RESPONSE

The Touch button is used to select a different touch sensitivity of the keyboard from the standard touch of an acoustic piano. You can change the sensitivity to one of five different settings: LIGHT1/ 2, HEAVY1/2 and OFF.



#### LIGHT

For those still developing finger strength. A louder volume is produced even when playing with a soft touch. LIGHT 2 is lighter than LIGHT 1.



#### **HEAVY**

Perfect for those with strong fingers. Requires a heavier touch to produce a loud volume. HEAVY 2 is heavier than HEAVY 1.



#### **OFF**

A constant volume is produced regardless of how hard the keys are struck. This setting is suitable for sounds that have a fixed dynamic range such as Organ and Harpsichord.

- (1) To change from the standard touch press the Touch button. The LED indicator of the Touch button will be turned on to indicate that the piano is now using a different touch setting.
- (2) Use the Value buttons to change the type of touch while the Touch button is held down.
- (3) Press the Touch button again to get back to the standard touch setting.

#### NOTE:

Touch selection is global for all the preset tones. You cannot have an individual setting for each tone. Once the power is turned off, the setting will be reset to the standard setting.

LIGHT and HEAVY do not represent the physical weight of the keys. These are settings that affect the sensitivity of the keys, which determines the volume level in response to the key movement.

## 4. VOICING

Voicing is a technique used by piano technicians to mold the character of a piano's sound. The Voicing function lets you change the EP2 piano's tone quality by choosing one of four types of voicing.

brE	Bright	Produces a brighter tone throughout the entire dynamic range.
dyn	Dynamic	The tone will change dramatically from mellow to bright with your playing.
NEL	Mellow	Produces a mellower tone throughout the entire dynamic range.
	Normal	(When the LED indicator is turned off) Produces the normal tone character of an acoustic piano throughout the entire dynamic range. This is the default voicing.

- (1) To change from the normal voicing press the Voicing button. The LED indicator of the Voicing button will be turned on to indicate that the piano is now using a different voicing setting.
- (2) Use the Value buttons to change the type of voicing while the Voicing button is held down.
- (3) Press the Voicing button again to return to the normal voicing setting.

The current voicing selection is global for all the preset tones. You cannot have an individual setting for each tone.

The voicing setting defaults to "Normal" each time the power is turned off. You can use the memory backup (page 28), to save your selected voicing. This way your current voicing selection will remain even after the power is turned off.

#### NOTE:

While voicing is a technique used for optimizing the tone of an acoustic piano, this function can be used on all the sounds on the EP2 piano.

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## DIGITAL RECORDING FUNCTIONS

## 1. EASY RECORDING

- (1) Press the Rec button. The EP2 will be ready for recording. To cancel the recording, press the Rec button again.
- (2) Begin playing some music on the piano. The EP2 will automatically start recording with the first note you play. You can also start recording by pressing the Play/Stop button.
- (3) Press the Play/Stop button when you have finished recording.

#### NOTE:

Starting another recording will delete the song you previously recorded. To learn how to save your recorded song and record another song please read the "ADVANCED RECORDING/PLAYBACK FUNCTIONS" section of this manual.

#### **METRONOME/SELECT TIME AND TEMPO**

The EP2's metronome function can help you record a song by providing a steady beat for you to play along with. The metronome beats however, are not recorded.

- (1) To start the metronome, press the Metronome button. You can change the beat (time signature) of the metronome. The EP2 has seven beats (time signatures) to choose from 1/4, 2/4, 3/4, 4/4,5/4, 3/8 and 6/8. While holding down the Metronome button, select the desired beat (time signature) of the metronome using the Value buttons.
- (2) The EP2 has an additional 30 rhythm styles available. Keep pressing Value Up button while holding down the Rhythm Metronome button. The rhythm style number will be shown in the LED display.
- (3) To adjust the tempo, use the Value buttons while the metronome is running. The tempo will be shown in the LED display.
- (4) To turn off the metronome function, press the Metronome button and the metronome will stop.

#### **METRONOME/ADJUST VOLUME**

The metronome volume can be adjusted in the range from 1 to 10 as follows.

- (1) Press the Metronome button while holding down the Touch and Transpose buttons. The LED indicator will start flashing and the LED display shows "VoL" and the volume level alternatively.
- (2) Use the Value buttons to adjust the volume. To exit the volume settings mode, press either Touch or Transpose button.

## 2. PLAYING BACK A SONG

- (1) Press the Play/Stop button. The song will be played back using the same sound with which it was recorded.
- (2) Press the Play/Stop button once again to stop the playback. If you do not press the Play/Stop button, playback will automatically stop when the song is finished.

You can adjust the tempo of playback. Before pressing the Play/Stop button, use the same procedure of adjusting metronome tempo. (See (3) of the previous section.) Once you adjust the tempo, turn off the metronome and press Play/Stop button.

## 3. ADVANCED RECORDING/PLAYBACK FUNCTIONS

### **RECORDING MORE SONGS**

The EP2 can record and store a maximum of 3 songs. Please follow the steps below to save your songs:

- (1) While holding down the Rec button, press the E.Piano (song 2) button. The LED will flash to show the current song number (while the Rec button is held down). The piano will be ready to record song 2. To cancel without recording, press the Rec button again.
- (2) Play the piano. Playing the piano will automatically start the recording. You can also start recording by pressing the Play/Stop button.
- (3) Press the Play/Stop button after you have finished recording.
- (4) Press the Play/Stop button. The song No.2 will be played back.
- (5) If you want to listen to song 1, hold down Play/Stop button and press the Piano (song 1) button. Releasing the Play/Stop button will start playback of song 1.

### RECORDING/PLAYING BACK THE LEFT AND RIGHT HAND PARTS SEPARATELY

The EP2 can record the parts played by the left or right hand and play back these parts separately or simultaneously. This function can be enjoyed in different ways. For example, you can practice the right-hand part of the song while playing back the recorded left-hand part, or record the melody part of the song while playing back the previously recorded accompaniment.

- (1) While holding down the Rec button, press the Organ (Song 3) button to select song No.3. Part 1 of song No.3 will be selected and the EP2 will be ready to record. To cancel without recording, press the Rec button again.
- (2) Play the piano with your left hand. Playing the piano will automatically start the recording. You can also start recording by pressing the Play/Stop button.

- (3) Press the Play/Stop button after you have finished recording.
- (4) Now, to play back the left-hand part, press the Play/Stop button. The left-hand part you have recorded (part 1 of song No.3) will be played back. You can practice the right-hand part along with the recorded part.
- (5) Let's record the right-hand part while listening to the left-hand part. While holding down the Rec button, press the Bass (Part 2) button. The part 1 LED will light and the part 2 LED will flash to indicate that the piano is ready to record. To cancel without recording, press the Rec button again.
- (6) Now play the right-hand part. Pressing any key will start play back of the recorded left-hand part (part 1) while you play (and record) the right-hand part. You can also start recording by pressing the Play/Stop button. After pressing the Play/Stop button the left-hand part will begin playing back, you can then begin playing (recording) the right hand part from any point in the song you like.
- (7) Press the Play/Stop button after you have finished recording.

## PLAYING BACK THE LEFT- AND RIGHT-HAND PARTS SEPARATELY

After you have recorded the left- and right-hand parts (part 1 and part 2) separately, it is possible to play back the two parts by themselves or together. The following example shows how to play back only part 2.

- (1) Select and press one of the song buttons (Piano/Song 1, E.Piano/Song 2, Organ/Song 3) while pressing the Play/Stop button.
- (2) While holding down the Play/Stop button, press the Clavi/Guitar/Part 1 button. The Clavi/Guitar/Part 1 button LED will be turned "off". If you need to turn part 1 back "on", press the Clavi/Guitar/Part 1 button once again. The Clavi/Guitar/Part 1 button LED will be turned "on".
- (3) Releasing Play/Stop button will play back only part 2. To turn On/Off part 2, follow the same procedure described above using the Bass/Part 2 button.

## 4. DELETING A SONG/PART

This function allows you to delete songs that were not recorded correctly or songs that you do not want to listen to any more.

- (1) Simultaneously hold down the Play/Stop and Rec buttons.
- (2) The LEDs will light to show you where songs have been recorded. While holding down both the Play/Stop and Rec buttons, press the song button that corresponds to the song you want to delete.

(3) While still holding down both the Play/Stop and Rec buttons, press the part button that you want to delete and turn the LED of that part button off.

To delete more than one song, repeat (1) to (3).

### NOTE:

The total memory capacity of the recorder is approximately 10,000 notes. When the recorder reaches its maximum capacity, the EP2 will stop recording at this point. Any data recorded before the interruption will be retained.

The recorder memory will be saved even after turning off the power.

To delete all recorded songs (reset), first turn the power off and then turn it back on again while holding down both the Play/Stop and Rec buttons.

## **FUNCTION MODE**

The Function Mode gives you access to many other useful features on your EP2. To enter the Function Mode, press the Touch and Transpose buttons simultaneously. The LED indicators for both buttons will start flashing. While holding the Touch and Transpose buttons, press the appropriate Sound button to select the function you want to edit. Each button is assigned one or two functions as listed below. Press the same Sound button again to select the alternative function. To exit the Function Mode, press either Touch or Transpose button.

	Function	Display	See page
Demo	Brilliance	Ьгі	22
Split	Tuning	Lun	23
Voicing	Damper Effect	dEF	23
Piano	String Resonance	5Er	23
E. Piano	Temperament	LNP	23
Organ	Lower Octave Shift	Lot	25
Strings	MIDI Channel	Ehn	25
Harpsi/Mallets	Transmitting Program Change Number	P50	26
Clavi/Guitar	MIDI Local Control On/Off	LcL	26
Bass	Transmit Prgram Change On/Off	PGn	26
Effects	Turning Multi-Timbral Mode On/Off	ΠLŁ	27
Reverb	Channel Mute	-	27
Rhythm/Metro	Metronome Volume	UoL	18
Play/Stop	Lower Pedal On/Off, Line Out EQ	LPd,LE9	28
Rec	Memory Backup	ПЕП	28

## 1. BRILLIANCE

Brilliance lets you adjust brightness of the preset sounds.



After selecting the "Brilliance" function by pressing the Demo button, use the Value buttons to change the value to the desired amount. The LED display shows the brilliance setting with a number. "0" indicates the standard setting. Brilliance can be set between -10 to +10. Plus settings produce a brighter tone, minus settings produce a mellower tone.

Brilliance settings are global for all the preset sounds. You cannot have an individual setting for each sound.

## 2. TUNING

Tuning allows you to adjust the piano's pitch. You may need to adjust the tuning when you play with other instruments.



After selecting the "Tuning" function by pressing the Split button, use the Value buttons to adjust the tuning. A tuning tone can be heard. The LED display shows the pitch for "A" in Hz (Hertz). For example, 40.0 stands for 440.0 Hz. The range of adjustment is from 427.0 to 453.0 Hz. The factory preset value is set to the modern standard A = 440.0 Hz.

## 3. DAMPER EFFECT

When the sustain pedal is depressed on an acoustic piano, all the dampers are lifted up allowing the strings to vibrate freely. When you play a note or chord on the piano with the sustain pedal depressed not only will the strings for the notes you played vibrate but other strings will vibrate in sympathetic resonance. The Damper Effect function simulates this phenomenon. You can select the level of effect from off, 1 to 10. The default setting is 5.



After selecting the "Damper Effect" function by pressing the Voicing button, use the Value buttons to select the desired setting.

## 4. STRING RESONANCE

Even when the sustain pedal is not depressed on an acoustic piano, the strings for any notes you are holding will be un-damped and will resonate freely in sympathy with the strings of other notes that you play if they are part of the same harmonic series. In addition, adjacent notes will also be resonated. The String Resonance function simulates this phenomenon. You can select the level of resonance from off, 1 to 10. The default setting is 5. String Resonance is not active when the sustain pedal is depressed.



After selecting the "String. Reso." function by pressing the Piano button, use the Value buttons to select the desired resonance.

## 5. TEMPERAMENT

The EP2 offers not only equal temperament (the modern standard) but also immediate access to temperaments popular during the Renaissance and Baroque periods. It should be interesting and educational to try some of the different temperaments, although the equal temperament is dominant today.



After selecting the "Temperament" function by pressing the E.Piano button, use the Value buttons to select your desired temperament. The LED display shows the type of temperament currently selected.

#### **BRIEF EXPLANATION OF TEMPERAMENTS**



### **EQUAL TEMPERAMENT (PIANO ONLY)**

This is the default temperament. If a piano sound is selected the tuning is stretched like an acoustic piano (EQUAL TEMPERA-MENT). If any other type of sound is selected the tuning will be EQUAL (FLAT). An explanation of EQUAL TEMPERAMENT and EQUAL TEMPERAMENT (FLAT) is provided later in this section.

### NOTE:

If a piano sound is used in a layer with any other sound then both sounds will use the EQUAL TEMPERAMENT (Stretched) tuning.



## 0\_0

## MERSENNE PURE TEMPERAMENT (Major) MERSENNE PURE TEMPERAMENT (minor)

This temperament, which eliminates dissonances for thirds and fifths, is still popular for choral music because of its perfect harmony. You need to be aware what key you are playing in with this temperament. Any key modulation will result in dissonances. When you play music in a particular key, you need to match the key of the temperament as well. When playing in a major key select Pure (Major) and when playing in a minor key select Pure (minor).



#### PYTHAGOREAN TEMPERAMENT

This temperament, which uses mathematical ratios to eliminate dissonance for fifths, is very limited for use with chords, but it produces very characteristic melodic lines.



#### MEANTONE TEMPERAMENT

This temperament, which uses a mean between a major and minor whole tone to eliminate dissonance for thirds, was devised to eliminate the lack of consonance's experienced with certain fifths for the Mersenne pure temperament. It produces chords that are more beautiful than those with the equal temperament.



## Ц\_\_\_

## WERCKMEISTER III TEMPERAMENT KIRNBERGER III TEMPERAMENT

These two temperaments are placed in between Meantone and Pythagorean. For music with few accidentals, this temperament produces the beautiful chords of the mean tone, but as accidentals increase, the temperament produces the characteristic melodies of the Pythagorean temperament. It is used primarily for classical music written in the Baroque era to revive the original characteristics.



### **EQUAL TEMPERAMENT (FLAT)**

This is "unstretched" equal temperament that divides the scale into twelve equal semitones. This produces the same chordal intervals in all twelve keys, and has the advantage of limitless modulation of the key. However the tonality of each key becomes less characteristic and no chord is in pure consonance.



### **EQUAL TEMPERAMENT**

This is the most popular piano temperament. The hearing ability of a human is uneven and is not as accurate with high frequency and low frequency as it is with the middle range. This temperament's tuning is stretched to compensate for this so the sound will be heard naturally to the ears. This "Stretched" equal temperament is a practical variation of the "unstretched" equal temperament, which was invented on a mathematical basis.

Limitless modulation of the key became available only after the invention of Equal temperament. When we use a temperament other than Equal temperament, we must carefully choose the key signature to play in. For example, if the song you are going to play is written in D major, choose "D" as the temperament key by pressing any "D" key on the keyboard. The LED display shows the currently selected key signature. Press either Touch or Transpose button to exit the Function Mode before you start playing.

#### NOTE:

Changing the key of the temperament will only change the "balance" of the tuning, the pitch of the keyboard remains unchanged. Use the Tuning or Transpose functions to change the pitch of the whole keyboard.

## **6. LOWER OCTAVE SHIFT**

This allows the octave of the lower part to be shifted up one, two, or three octaves higher when you use the split function.



After selecting the "Lower Octave Shift" function by pressing the Organ button, use the Value buttons to select your desired shift range. The LED display shows how many octaves the lower part is shifted up. Lower Octave Shift can be set between the values of 0 to 3.

## 7. MIDI CHANNEL

This determines on which MIDI channel the EP2 will exchange MIDI information with an external MIDI instrument or a personal computer.



After selecting the "MIDI Channel" function by pressing the Strings button, use the Value buttons to select your MIDI channel. The LED display shows the currently selected channel number.

In order to exchange MIDI information with another MIDI instrument, you must first set the two connected instruments to the same channel.

When the power is first turned on, the EP2 always selects "on1" which means omni on, channel 1. If you change it to 1 through 16, omni automatically turns off.

## 8. TRANSMITTING PROGRAM CHANGE NUMBER

This function allows the EP2 to transmit program change numbers beyond the 21 pre-defined numbers transmitted by the Sound buttons. Using this function, you can send any number from 1 to 128.



After selecting the "Transmitting Program Change Number" function by pressing the Harpsi/Mallets button, use the Value buttons to select your desired number. The LED display shows the program change number. To send the program change number, press both Value buttons simultaneously.

## 9. MIDI LOCAL CONTROL ON/OFF

This determines whether the EP2 piano's sound will be played from the piano's keyboard ("ON") or only from an external MIDI instrument ("OFF").

Even with local control "off" the piano's keyboard will still transmit to an external MIDI instrument or personal computer.



After selecting the "Local Control" function by pressing the Clavi/ Guitar button, use the Value buttons to turn Local Control on and off. The LED display shows whether Local Control is on or off.

## 10. TRANSMIT PROGRAM CHANGE ON/OFF

This determines whether or not the EP2 will transmit program change information when pressing the Sound buttons. When this is turned on, pressing the Sound buttons will send the program change numbers as listed in page 32.



After selecting the "Transmit Program Change On/Off" function by pressing the Bass button, use the Value buttons to turn Transmit Program Change on and off. The LED display shows whether or not program change numbers will be transmitted.

When the power is first turned on, the Transmit Program Change On/Off function is always "on".

## 11. TURNING MULTI-TIMBRAL MODE ON/OFF

Multi-timbral mode allows the EP2 to receive data on more than one MIDI channel simultaneously. In this mode, the EP2 can play different musical parts with different sounds for each part.

### Multi-Timbral On (On1 and On2)

This is a flexible 16 part multi-timbral setup. You can turn individual MIDI channels on and off, and assign any program number to any channel in the way you like. The EP2's normal program change numbers are assigned in On1 (Please see page 32 for a list of the program change numbers), and General MIDI program change numbers are assigned in On2.

#### **Multi-Timbral Off**

This turns off the multi-timbral capability. Only one MIDI channel will be active and only the preset sound currently selected will be heard when a MIDI signal is received.



After selecting the "Multi-Timbre" function by pressing the Effects button, use the Value buttons to turn Multi-Timbre on and off. The LED display shows the selected Multi-timbral mode.

When the power is first turned on, the Multi-Timbral Mode setting is always off.

## 12. CHANNEL MUTE

This determines which MIDI channels are activated to receive when used with Multi-Timbral On. You can activate or deactivate each of the 16 channels individually.



Channel 1

After selecting the "Channel Mute" function by pressing the Reverb button, press one of the 16 left most white keys to select the desired channel. Then use the Value buttons to turn them on and off.

NOTE: When the Multi-Timbral mode is set to off, the "Channel Mute" function is not available.

## 13. LOWER PEDAL ON/OFF

This determines if the sustain pedal will be active for lower sound when in Split mode. The default setting is Off which means the sustain pedal is not active the lower sound.



After selecting the "Lower Pedal" function by pressing the Play/Stop button, use the Value buttons to turn it on and off. The LED display shows whether Lower Pedal is on or off.

## 14. Line Out EQ

It is recommended that you turn Line Out EQ on when you play the EP2 using external speakers or when recording.



After selecting the "Line Out EQ" function by pressing the Play/Stop button twice, use the Value buttons to select on or off. The LED display shows whether the Line Out EQ is on or off.

With headphones, the normal sound of the EP2 is reproduced.

The Line Out EQ setting is global for all the preset sounds. You cannot have an individual setting for each sound.

## **15. MEMORY BACKUP**

This function allows the EP2 to save the user-definable settings when the power is turned off. Once written to the memory, the saved settings will be recalled every time you turn the power on.



After selecting the "Memory Backup" function by pressing the Rec button, use the Value buttons to select "user" or "restore". Then press the Rec button to write the settings. The LED display briefly shows "Wrt" and the memory backup is executed.

## **FACTORY RESET**

If you want to recall the original factory settings, turn the power off and then turn it back again while holding down both the Touch and Transpose buttons at the same time.

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## MIDI

The term MIDI is an acronym for Musical Instrument Digital Interface, an international standard for connecting synthesizers, sequencers (digital recorders) and other electronic instruments so that they can exchange performance data.

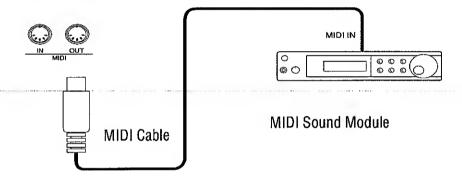
The EP2 is equipped with two MIDI jacks for exchanging data: MIDI IN and MIDI OUT. Each uses a special cable with a DIN connector.

MIDI IN: For receiving note, program change and other data. MIDI OUT: For sending note, program change and other data.

## **MIDI EXAMPLES**

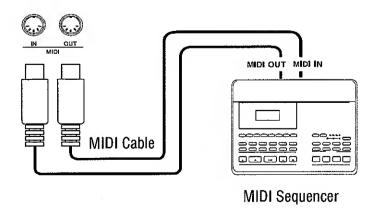
## (1) Connection to another MIDI compatible keyboard or sound generator module

When connected as shown in the illustration, data on how the digital piano is played (which keys are struck) can be sent to another MIDI instrument. Plus, the sound from the EP2 can be layered over the sound of the other instrument.



#### (2) Connection to an external sequencer

When connected as shown in the illustration, you can record songs played on the EP2 with a sequencer, and use the EP2's sounds (such as piano, harpsichord and vibraphone, etc.) controlled by the EP2's Multi-Timbral Mode function to create a multi-layer MIDI recording.



## **USB**

The EP2 can be connected with a personal computer with a USB cable for exchanging MIDI data. You need a USB driver installed in your computer.

## [For Windows XP/Me users]

A standard USB driver is already installed in your computer. You don't need to install a new driver.

#### [For Windows 2000/98SE users]

You need to install the designated driver in your computer. Visit the KAWAI web site at <a href="http://www.kawai.co.jp/english/Download1.html">http://www.kawai.co.jp/english/Download1.html</a> and download the program.

### [For Macintosh users]

Currently we don't have a USB driver available for Macintosh computers. Please use an appropriate MIDI interface and MIDI cables when connecting the EP2 to a Macintosh computer.

#### NOTE:

When both MIDI jacks and USB jack are connected, USB has priority.

When connecting USB cable to the EP2, first connect the USB cable and then turn the power of the EP2 on.

It may take some time to start communication when the EP2 is connected to the computer via USB. When USB communication is unstable with connection via hub, connect the USB cable directly to the USB port of the computer.

Turning the power of EP2 on/off or disconnecting the USB cable while the following actions may cause unstable communication.

while installing USB driver

while booting up the computer

while MIDI application is working

while communicating with the computer

while the computer is in energy saver mode

- \* If you have any problem with USB communication, consult the instruction manual of your computer and check your computer set up.
- \* The USB-MIDI conversion board TID10000934 used in the EP2 is approved to show the USB logo. The USB logo can be used only for the product, which is approved by USB-IF (USB Implements Forum Inc.) test.
- \* Windows is registered trademark of Microsoft Corporation.
- \* Macintosh is registered trademark of Apple Computer, Inc.

## **Program Change Number Mapping**

			Multi-Timbral mode			
Sound Button		Sound Name	Off, On 1 On 2			
			Prog #	Bank M\$B	Bank LSB	Prog #
PIANO	1	Concert Grand	1	121	0	1
	2	Studio Grand	2	121	1	1
	3	Mellow Grand	3	121	2	1
E. PIANO	1	Classic E.Piano	4	121	0	5
	2	Modern E.P.	5	121	0	6
	3	Modern E.P. 2	6	121	1	6
ORGAN	1	Jazz Organ	7	121	0	18
	2	Church Organ	8	121	0	20
STRINGS / CHOIR	1	String Ensemble	9	121	0	49
	2	Choir	10	121	0	53
HARPSI / MALLETS	1	Harpsichord	11	121	0	7
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2	Vibraphone	12	121	0	12
CLAVI /GUITAR	1	Clavi	13	121	0	8
	2	Nylon Acoustic	14	121	0	25
BASS	1	Wood Bass	15	121	0	33
A LABORATOR WE I	2	Electric Bass	16	121	0	34
- Mary	3	W. Bass & Ride	17	95	1	33
HIDDEN DRUMS		Standard Kit 1	18*	120	0	1
	••••	Standard Kit 2	19*	120	0	33
		Room Kit	20*	120	0	9
		Analog Kit	21*	120	0	26

<sup>\*</sup>Active only in On1 mode.

## **DEMO SONG LIST**

Main Demo Original

Piano Concert Grand Valse, op. 64-1 / Chopin

Studio Grand Original

Mellow Grand La Fille aux Cheveux de lin / Debussy E. Piano Classic E. Piano Original

Classic E. Piano Original
Modern E. P. Original
Modern E.P. 2 Original

Organ Jazz Organ Original

Church Organ Toccata / Eugene Gigout
Strings / Choir String Ensemble Le quattro stagioni La primavera /

Strings / Choir String Ensemble Le quattro stagioni La primavera / Vivaldi Choir Original

Harpsi/Mallets Harpsichord French Suite No.6 / Bach

Vibraphone Original

Clavi / Guitar Clavi Original

Nylon Acoustic Original

Bass Wood Bass Original
Electric Bass Original
W. Bass & Ride Original

## **RHYTHM LIST**

1 8 Beat 1

2 8 Beat 2

3 16 Beat 1

4 16 Beat 2

5 16 Beat 3

6 Ride Beat 1

7 Ride Beat 2

8 Rock Beat

9 Surf Rock

10 Ballad 1

11 Ballad 2

12 Light Ride 1

13 Light Ride 2

14 Smooth Beat

14 Smooth Bear

16 Funky Beat

17 Disco

18 8 Shuffle

19 Triplet

20 Triplet Ballad

21 Waltz

22 Motown 1

23 Motown 2

24 Ride Swing

25 H.H. Swing

26 Jazz Waltz

27 H.H. Bossa Nova

28 Mambo

29 Light Samba

30 Surdo Samba

## **DRUM SOUND MAPPING**

		Standard Kit 1	Standard Kit 2	Room Kit	Analog Kit
	C#	Snare Roll	Snare Roll	Snare Roll	Snare Roll
	D	Finger Snap	Finger Snap	Finger Snap	Finger Snap
	D#	High Q	High Q	High Q	High Q
	E	Slap	Slap	Slap	Slap
	F	Scratch Push	Scratch Push	Scratch Push	Scratch Push2
	F#	Scratch Pull	Scratch Pull	Scratch Pull	Scratch Pull2
	G	Sticks	Sticks	Sticks	Sticks
	G#	Square Click	Square Click	Square Click	Square Click
	A	Metronome Click	Metronome Click	Metronome Click	Metronome Click
	A#	Metronome Bell	Metronome Bell	Metronome Bell	Metronome Bell
G0	В	Std1 BD2	Std2 BD2	Room BD2	Analog BD2
C2	C C"	Std1 BD1	Std2 BD1	Room BD1 Rim	Analog BD1
	C#	Rim	Rim Std2 SD1	Room SD1	Analog Rim
	D D#	Std1 SD1	Hand Clap	Hand Clap	Analog SD1 Hand Clap
	D#	Hand Clap	Std2 SD2	Room SD2	Analog SD2
	E F	Std1 SD2 Std1 Low Tom2	Std2 SD2 Std2 Low Tom2	Room Low Tom2	Analog SD2 Analog Low Tom2
	r F#	Std1 HHC	Std2 HHC	Room HHC	Analog HHC
	G G	Std1 Low Tom1	Std2 Low Tom1	Room Low Tom1	Analog Low Tom1
	· G#	Std1 HHP	Std2 HHP	Room HHP	Analog HHP
	G# A	Std1 Mid Tom2	Std2 Mid Tom2	Room Mid Tom2	Analog Mid Tom2
	A A#	Std1 HHO	Std2 HHO	Room HHO	Analog HHO
	В	Std1 Mid Tom1	Std2 Mid Tom1	Room Mid Tom1	Analog Mid Tom1
C3	č	Std1 Hi Tom2	Std2 Hi Tom2	Room Hi Tom2	Analog Hi Tom2
<b>C</b> 3	C#	Std1 Crash1	Std2 Crash1	Room Crash1	Analog Crash1
	D.	Std1 Hi Tom1	Std2 Hi Tom1	Room Hi Toml	Analog Hi Tom1
	D#	Std1 Ride1	Std2 Ride1	Room Ridel	Analog Ride1
	E	China	China	China	China
	F	Cup	Cup	Cup	Cup
	F#	Tambourine	Tambourine	Tambourine	Tambourine
	G	Splash	Splash	Splash	Splash
	G#	Cowbell	Cowbell	Cowbell	Analog Cowbell
	Α	Crash2	Crash2	Crash2	Crash2
	A#	Vibra Slap	Vibra Slap	Vibra Slap	Vibra Slap
	В	Ride2	Ride2	Ride2	Ride2
C4	С	Hi Bongo	Hi Bongo	Hi Bongo	Hi Bongo
	C#	Low Bongo	Low Bongo	Low Bongo	Low Bongo
	D	Mute Hi Conga	Mute Hi Conga	Mute Hi Conga	Analog Hi Conga
	D#	Hi Conga	Hi Conga	Hi Conga	Analog Mid Conga
	Е	Low Conga	Low Conga	Low Conga	Analog Low Conga
	F	Hi Timbale	Hi Timbale	Hi Timbale	Hi Timbale
	F#	Low Timbale	Low Timbale	Low Timbale	Low Timbale
	G G"	Hi Agogo	Hi Agogo	Hi Agogo	Hi Agogo Low Agogo
	G#	Low Agogo Cabasa	Low Agogo Cabasa	Low Agogo	Cahasa
	A				
				Cabasa	
	A#	Maracas	Maracas	Maracas	Analog Maracas
CS	В	Maracas Short Whistle	Maracas Short Whistle	Maracas Short Whistle	Analog Maracas Short Whistle
C5	B C	Maracas Short Whistle Long Whistle	Maracas Short Whistle Long Whistle	Maracas Short Whistle Long Whistle	Analog Maracas Short Whistle Long Whistle
C5	B C C#	Maracas Short Whistle Long Whistle Short Guiro	Maracas Short Whistle Long Whistle Short Guiro	Maracas Short Whistle Long Whistle Short Guiro	Analog Maracas Short Whistle Long Whistle Short Guiro
C5	B C C# D	Maracas Short Whistle Long Whistle Short Guiro Long Guiro	Maracas Short Whistle Long Whistle Short Guiro Long Guiro	Maracas Short Whistle Long Whistle Short Guiro Long Guiro	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro
CS	B C C# D D#	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves
C5	B C C# D D# E	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk
C5	B C C# D D# E	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk
CS	B C C# D D# E F	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk Mute Cuica
C5	B C# D D# E F# G	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk
C5	B C C# D D# E F F G G#	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle
CS	B C C# D# E F F G G#	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica
C5	B C C# D# E F F# G G# A	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Shaker	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle
C5	B C C# D E F F G G# A A# B	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker
	B C C# D D# E F G G# A A# B C	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Shaker Jingle Bell	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell
	B C C# D E F F G G# A A# B	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell Bell Tree	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell Bar Chimes	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell Bar Chimes	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell Bar Chimes
	B C C# D D# E F G G# A A# B C C#	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell Bell Tree Castanets	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell Bar Chimes Castanets	Maracas Short Whistle Long Whistle Short Guiro Long Guiro Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell Bar Chimes Castanets	Analog Maracas Short Whistle Long Whistle Short Guiro Long Guiro Analog Claves Hi Wood Blk Low Wood Blk Mute Cuica Open Cuica Mute Triangle Open Triangle Shaker Jingle Bell Bar Chimes Castanets

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## **SPECIFICATIONS**

-	EP2				
Keyboard	88 Keys with Advanced Hammer Action IV				
Polyphony	Maximum 96				
Preset Tones	Piano (3), E. Piano (3), Organ (2), Strings/Choir (2),				
	Harpsi/Mallets (2), Clavi/Guitar (2), Bass (3)				
Effects	Chorus, Delay, Tremolo, Rotary (2)				
Reverb	Room 1, Room 2, Stage, Hall 1, Hall 2				
Voicing	Normal, Bright, Dynamic, Mellow				
Metronome	1/4, 2/4, 3/4, 4/4, 5/4, 3/8, 6/8 + 30 rhythm				
Temperaments	Equal (Piano Only), Mersenne pure (Major),				
	Mersenne pure (minor), Pythagorean, Meantone,				
	Werckmeister III, Kirnberger III, Equal (flat), Equal				
Other Features	Master Volume, Dual, Split, Dual/Split Balance,				
	Four Hands Mode, Transpose, Tune, Voicing,				
	Damper Effect, String Resonance, Brilliance,				
	Touch Curve (Normal, Light (2), Heavy (2), Off),				
	MIDI (16 part multi-timbral capability)				
Recorder	2 Tracks, 3 Songs				
	The total memory capacity is approximately 10,000 notes.				
Pedal	Sustain (Sustain, Soft with optional F-20 foot pedal)				
Jacks	Headphone (2), LINE IN (Stereo), LINE OUT (L/MONO, R),				
	PEDAL, MIDI (IN, OUT), USB				
Output Power	13Wx 2				
Power Consumption 35W *AC Adaptor : PS-15					
Speakers	5 cm x 6				
	2 inch x 6				
Dimensions	136.2 x 32.1 x 13.8 cm				
$(W \times D \times H)$	54 x 13 x 5 inch				
Weight	20.7 kg, 46 LB's				

Specifications are subject to change without notice.

## **MIDI IMPLEMENTATION CHART**

KAWAI DIGITAL PIANO

MODEL: EP2

Date: January 2007

Version: 1.0

FUNCTION	TRANSMITTED	RECEIVED	REMARKS
Basic Channel			·
(Default)	1	1	
(Changed)	1-16	1-16	
Mode (Default)	3	1	Omni On, channel 1
(Message)	x	1, 3*	*Omni Off by setting
(Altered)	*****	-, -	MIDI channel
Note Number	9-120*	0-127	*with Transpose
(True Voice)	*****	0-127	F
Velocity			
(Note ON)	O: 9nH v=1-127	O	
(Note OFF)	x: 8nH v=0	x	
After Touch			
Key's	x	x	1
Channel's	x	x	
Pitch Bend	x	x	
Control Change			
0,32	O	O	Bank Select
7	x	0	Volume
11	x	0	Expression pedal
64	0	Ο	Sustain pedal
66	x	O	Sostenuto pedal
67	O (with F-20 pedal)	0	Soft pedal
Program Change	0	0	
True	*****		
System Exclusive	0	O	
Common			
(Song Position)	x	x	
(Song Select)	x	x	
(Tune)	x	X	
System: Real Time			
(Clock)	x	x	
(Commands)	x	x	
Others			
(Local ON/OFF)	x	Ο	
(All Notes OFF)	x	O*	*When Multi-Timbral
(Active Sense)	0	O*	mode is On
(Reset)	x	x	
Mode 1: OMNI ON, POL	Y Mode 2: OMNI ON,	MONO	O : Yes
Mode 3: OMNI OFF, POI	LY Mode 4: OMNI OFF,	MONO	X : No

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# **KAWAI**

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